

Application No. 10/534,947
Paper Dated: March 19, 2008
In Reply to USPTO Correspondence of December 19, 2008
Attorney Docket No. 4623-051371

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include new Figs. 10a-10c and 11. These sheets, which include Figs. 1-11, replace the original sheets including Figs. 1-9c.

Attachment: Replacement Sheets (6)
New Sheets (2)

REMARKS

The Office Action of December 19, 2008, has been reviewed and the Examiner's comments carefully considered. Claims 1 and 16 have been amended, claim 19 has been cancelled, and new claims 20 and 21 have been presented by way of this Amendment. Accordingly, claims 1-18, 20 and 21 are currently pending in this application, and claims 1 and 20 are in independent form. Support for the amendments made herein can be found in Figs. 1-2b; page 6, line 26 to page 7, line 20 of the specification; page 9, line 33 to page 10, line 24 of the specification; and original claims 1-19. Applicants respectfully submit that no new matter is being added by way of this Amendment. Claim 16 has been amended to correct a minor informality.

The drawings have been objected to for failing to show the following claimed features: spike twisted about an axis (claim 15); and a pressing station, including a pressing station having a female template (claims 17-19).

New drawings sheets are presented by way of this Amendment. The new drawing sheets include Figs. 10a-10c, which illustrate the spikes twisted about their longitudinal axes, and Fig. 11, which illustrates the pressing station. Claim 19, which contained the subject matter as to the pressing station including a female template has been cancelled. Applicants respectfully request that the objection to the drawings be withdrawn.

Claims 1-4, 8-12 and 14-16 stand rejected under 35 U.S.C. §102(b) for anticipation by U.S. Patent No. 3,416,283 to Sanford (hereinafter "Sanford"). Claims 5-7 and 13 stand rejected under 35 U.S.C. §103(a) for obviousness over Sanford. Claims 17-19 stand rejected under 35 U.S.C. §103(a) for obviousness over Sanford in view of U.S. Patent No. 4,157,676 to Jureit (hereinafter "Jureit"). In view of the foregoing amendments and the following remarks, reconsideration and withdrawal of these rejections are respectfully requested.

Independent claim 1 defines a continuous metal connector for use in the fabrication of structural I-beams comprising upper and lower flanges in which each flange includes a pair of timber members, the connector including: a continuous metal web, the web extending continuously in a direction along the flanges of the I-beam and transversely between the flanges of the I-beam; and two spatially separated attachment sections that are integrally

formed with the metal web and extend therefrom, the attachment sections are located between the timber members of each flange, wherein at least one of the attachment sections has a plurality of spikes projecting outwardly from opposite sides that are capable of piercing and fastening one pair of timber members to the connector to form one of the flanges of the I-beam.

Independent claim 20 defines an integrally formed metal connector for use in the fabrication of structural I-beams having upper and lower flanges in which each flange includes a pair of timber components, the connector including: a continuous metal web that extends longitudinally of the flanges of an I-beam and transversely between the flanges of the I-beam in a panel formation; and spatially separated attachment sections that extend from the metal web in a single one piece structure, wherein the attachment sections are adapted for location between the timber components of the upper and lower flanges and include a plurality of spikes projecting outwardly from opposite sides thereof that are capable of piercing and fastening one pair of timber components to the connector to form the flanges of the I-beam.

Applicants submit that Sanford and Jureit taken separately or combined, fail to teach or suggest the above-mentioned claimed subject matter of claims 1 and 20.

Sanford teaches a truss-beam comprising upper and lower timber flanges and a series of diagonal elongate chord members (113A, 113B, 113C). As shown in Figs. 1 and 12 of Sanford, a series of individual chord members (13, 113) are arranged between the upper and lower flanges in a triangular formation to provide structural rigidity to the beam. This beam is known as a truss-beam structure. Sanford does not teach or suggest a continuous metal connector having a web that extends continuously in a direction along the flanges of an I-beam and transversely between the flanges of the I-beam, as is claimed in claims 1 and 20.

Additionally, the chords (13, 113) taught by Sanford include load transferring flanges (18, 118). As shown in Figs. 4 and 5 of Sanford, the load transferring flanges (18, 118) include a plurality of holes (25). The holes (25) receive teeth of separate connector plates (26, 126), which may have teeth projecting from one or both sides thereof and which are secured between the pairs of timber flanges. Thus, the assembly of the truss-beam taught by Sanford is a far more complicated process, whereby multiple chords (13, 113) and connector plates (26, 126) are aligned with the holes (25) in the load bearing flanges (18, 118), while locating the elongate

chords (13, 113) at an appropriate diagonal orientation relative to the flanges. Alignment of the connector plates (26, 126) with the holes (25), and the secondary alignment of the multiple elongated chords down the length of the timber members must be simultaneously carried out.

This stands in stark contrast to the present invention, which provides a significantly simplified structure that is specifically suited for manufacture using an automated assembly line. The simplified structure includes attachment sections having spikes projecting outwardly from opposite sides of at least one side of the attachment sections, wherein the attachment sections are integrally formed and extend from the continuous metal web. The integral structure of the metal connector of the present invention enables assembly of the I-beam to be carried out simply by aligning the timber members over the attachment sections and pressing the timber members into position onto spikes projecting from the attachment sections. Sanford does not teach or suggest such an integral or one piece structure, as is claimed in claims 1 and 20.

Jureit teaches a double-sided nail plate or gang plate in which the teeth are distributed and arranged on the nail plate on an angle to each other. Jureit does not teach or suggest a metal connector for fabrication of structural I-beams that include a pair of timber members that includes a continuous metal web extending a direction along the flanges of the I-beam and transversely between the flanges of the I-beam, and two spatially separated attachment sections that form a single or integral piece with the continuous metal web and are located between the timber members of each flanges, as is claimed in claims 1 and 20. As such, Jureit fails to fairly suggest a modification to the truss-beam and connectors taught by Sanford that reaches the claimed invention.

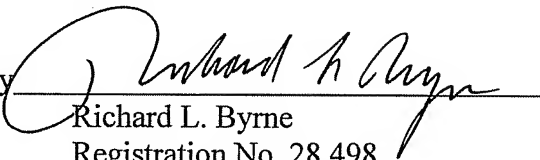
Applicants submit that claims 1 and 20 are allowable for at least the foregoing reasons, as the teachings of the prior art of record, including Jureit, are not sufficient to overcome the deficiencies in the teachings of Sanford with respect to claims 1 and 20.

Claims 2-18 and 21 are dependent upon and add further limitations to independent claim 1, and are allowable for at least the same reasons discussed above in connection with claim 1.

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Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of pending claims 1-18, 20 and 21 are respectfully requested.

Respectfully submitted,
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